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# WeldTech® 75

# Socket Fusion Bench Tool

# Operation & Maintenance Manual

*Corrosion Resistant Fluid and Air Handling Systems.*

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# 1 Description of Product

This chapter gives important basic information about the product and its purpose-oriented use. In addition, all technical details of the machine are arranged clearly.

## 1.1 Usage and Purpose-oriented Use

The WeldTech 75 has been designed for heating element socket welding of pipes and fittings made out of PE, PP and PVDF with their outside diameter range going from 20 - 75 mm.

The motion necessary for socket welding is controlled by a transport wheel and a rack. All use of this machine going beyond is not purpose-oriented.

The manufacturer is not responsible for damages caused by inexpert handling or operation. Only the user is responsible for damages resulting herefrom.

Also part of the purpose oriented use is

- Respecting all the indications of the working instructions and
- Performing the inspection and maintenance works.

## 1.2 Safety Measures

In case of wrong use, wrong operation or wrong maintenance, the machine itself or products standing nearby can be damaged or destroyed.

Persons being in the endangered area may be injured.

Therefore these working instructions have to be thouroughly read and the corresponding safety regulations must be necessarily adhered to.

## 1.3 Conformity

The machine corresponds in its construction to the valid recommendations of the European Community as well as to the according European standard specifications. The development, manufacturing and mounting of the machine were made very carefully.


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## 1.4. Desingnation of Product

The product is designated by a sign at the frame.
It contains the type of the machine, the serial number and the year of construction.

### 1.4.1. Technical Data

### 1.4.1.1. WeldTech 75 General Data

| | |
|---|---|
| Material: | PP, PEHD, PVDF, PB |
| Diameter: | Poutside = 20- 75 |
| transport box (LxBxH): | 450x300x365 (mm) |
| Weight (without case): | 30 kg |
| Fuse protection: | 0.416 |
| Emissions: | - the sound intensity level is below 70 dB (A) |
| | - when using the named pipe materials and when welding below 260° C no toxicant damp arises. |
| Enviroment: | - keep the workshop clean ! (especially the welding area must be clean) |
| | - do not weld below 5° C, if necessary heat-up before welding |
| | - avoid humidity, if necessary put up a tent |
| | - avoid strong sun beams |
| | - if it is windy shut the pipe ends |

### 1.4.1.2. Heatinq Element:

| | |
|---|---|
| Power: | 630 Watt |
| Voltage: | 110V (+- 10%) |
| Current: | 5,4 A (+- 10%) |
| Wire cross section: | 1,5 mm2 |
| Frequency: | 60 Hz |
| Elements: | - elektronic temperature control |
| | - Control lamp |
| | - Connection cabel whith shock proof plug |
| Weight: | Appr.2 kg |

Stock numbers for component parts see spare parts list”


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## 1.5 Equipment and Accessories

Following accessories are part of the first delivery:

| | |
|---|---|
| 2 x | Allan key size 3; 5 |
| | (radial adjustment of heating element; screwing in and out the clamping |
| | elements) |
| 2 x | Allan key with T-grip size 6; 5 |
| | (removing the basic body and the heating element) |
| 1x | Socket spanner size 10 |
| | (for attaching the heating sockets and spigots) |
| 6x | Clamping devices for pipes 0 20 - 40 mm |
| | Clamping devices for pipes 0 50 - 75 mm |
| | (1 set already mounted) |
| 1x | Screw driver |

Following optional accessories are available on request:
Table support with guide groove for heating element when being removed from the machine.
Fork wrench size 22; 24 (adjusting nut; counter nut)


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# 2 Safety Rules

The base for the safe handling and the fault-free operation of this machine is the knowledge of the basic safety indications and rules.

- These working instructions contain the most important indications to run the machine safely.
- The safety indications are to be followed by all persons working on the machine.

## 2.1 Explanation of the Symbols and Indications

In the working instructions, following denominations and signs are used for dangers:

This symbol means a possible danger for the life and the health of persons.

- The non-respect of these indications may have heavy consequences for the health.

This symbol means a possible dangerous situation.

- The non-respect of these indications may cause light injuries or damages on goods.

This symbol gives important indications for the proper use of the machine.

- The non-respect of these indications may conduct to misfunctions and damages on the machine or on goods in the surrounding.

Under this symbol you get user tips and particularly useful information.

- It is a help for using all the functions on your machine in an optimal way and helps you to make the job easier.

The regulations for the prevention of accidents are valid (UVV)

## 2.2 Obligations of the Owner

The owner is obliged only to let persons work at the machine, who

- Know about basic safety and accident prevention rules and are instructed in the handling of the machine, as well as who
- Have read and understood the safety chapter of this manual and certify this by their signature.
- The safety-conscious working of the staff has to be checked in regular intervals.

## 2.3 Obligations of the Worker

All persons who are to work at the machine are obliged before working:

- To follow the basic safety and accident protection rules
- To have read and understood the safety chapter and the warnings in this manual and to confirm by their signature that they have well understood them.
- To inform themselves about the functions of the machine before using it.

## 2.4 Measures of Organisation

- All equipment required for personal safety is to be provided by the owner.
- All available safety equipment is to be inspected regularly.

## 2.5 Information about Safety Precautions

- The working instructions have to be permanently kept at the place of use of the machine. They are to be at the operator's disposal at any time and without effort.
- In addition to the manual, the common valid and the local accident protection rules and regulations for the environmental protection must be available and followed.
- All safety and danger indications on the machine have to be in a clear readable condition.
- Every time the machine changes hands or is being rent to third persons, the working instructions are to be sent along with and their importance is to be emphasized.

## 2.6 Instructions for the Staff

- Only skilled and trained persons are allowed to work at the machine.
- It must be clearly defined who is responsible for transport, mounting and dismounting, starting the operation, setting and tooling, operation, maintenance and inspection, repair and dismounting.
- A person who is being trained may only work at the machine under supervision of an experienced person.

## 2.7 Dangers while Handling the Machine

The machine WeldTech 75 is constructed according to the latest technical standard and the acknowledged technical safety rules.

However, dangers for the operator or other persons standing nearby may occur. Also material damages are possible.

The machine should only be used

- According to the purpose oriented usage
- In safety technical impeccable status.

Disturbances, which may affect the safety of the machine must be cleared immediately.


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## 2.8 Maintenance, Inspection and Repair

All maintenance and repair works have to be basically performed with the machine in off position. During this the machine has to be secured against unintentional switching on.

Prescribed maintenance and inspection works should be performed in time. The DVS gives the advice of inspection works after 1 year.
For machines with a specially high usage percentage the testing cycle should be shortened.

The works should be performed at SIMTECH or by an authorized partner.

## 2.9 Dangers caused by Electric Energy

Only skilled persons are allowed to work at electrical appliances.

- The electrical equipment of the machine has to be checked regularly. Loose connections and damaged cables have to be replaced immediately
- If works at alive parts are necessary, a second person has to be present who can disconnect the machine in emergency cases.
- The heating element is to be protected from rain and dropping water. If need be use a welding tent.
- According to VDE 0100, the use on construction sites is only allowed with a power distributor with a FI-safety switch.

### 2.9.1 Danger of being burnt by Heating Element and Welding Area

You can burn parts of your body and inflammable materials can also be ignited !
The heating element is heated up to more than 260°C !

- Do not touch the surfaces of the heating element.
- Do not leave the heating element unsupervised.
- Take enough safety distance to inflammable materials.
- Do wear safety gloves.

### 2.9.2 Danger of Sugeezing by Guideways

There is a danger of serious injuries: on the one hand between the inner clamping devices and on the other hand between the outer clamping device and the end of the guideway.

- **Do not put hands between clamped pipe ends.**
- **Do not touch the guideways.**

## 2.10 Structural Modifications on the Machine

- No modifications, extensions or reconstructions may be made on the machine without permission of the manufacturer.
- Machine parts which are not in a perfect condition are to be replaced immediately.
- Only use original WIDOS spare and wear parts.
- In case of purchase orders please always state the machine and version number !

## 2.11 Cleaning the Machine

The used materials and tissues are to be handled and disposed of properly, especially

- When cleaning with solvents
- When lubricating with oil and grease

## 2.12 Warranty and Liability

Fundamentally our “General Sales and Delivery Conditions” are valid.

They are at the owner’s disposal latest when signing the contract.

Guarantee and liability demands referring to personal injuries or damages on objects are excluded if they are caused by one or several of the following reasons:

- Not using the machine according to the prescriptions
- Inexpert transport, mounting, starting, operating and maintenance of the machine
- Running the machine with defective or not orderly mounted safety appliances
- Ignoring the indications given in this manual
- Structural modifications on the machine without permission
- Unsatisfactory checking of parts of the machine, which are worn out
- Repairs performed in an inexpert way
- In case of catastrophes and force majeure.


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# 3 Functional Description

Basically, the international and national standard specifications have to be followed.

First of all, the two workpieces to be welded are put into the clamping device, the fitting is clamped at the stop of the clamping device.

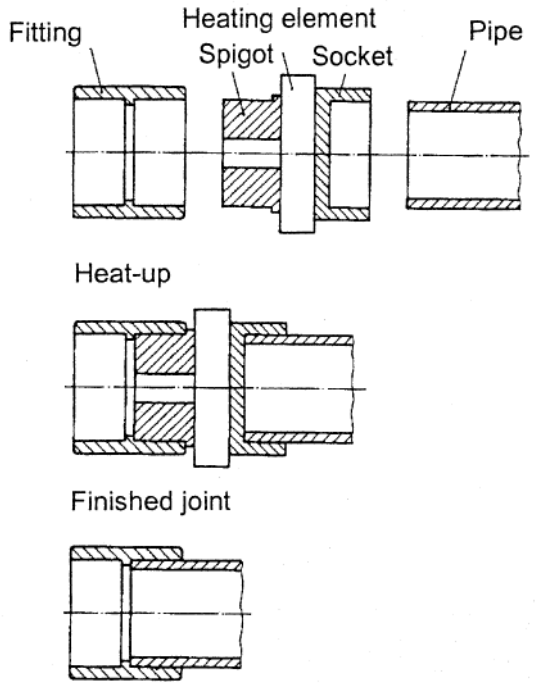
Then the zero offset is effected and the pipe can be clamped in such a way that both workpieces can be heated up to welding temperature at the same time (heat-up time) by means of a socket- or spigot-shaped heating element.

After swinging out the heating element (change-over time), the workpieces are joined (cooling time).

The pipe end, heating element and fitting socket are to match each other in size in such a way that a joining pressure will build up during joining.

After expiration of the cooling time, the welded joint can be unclamped, the welding process is finished.

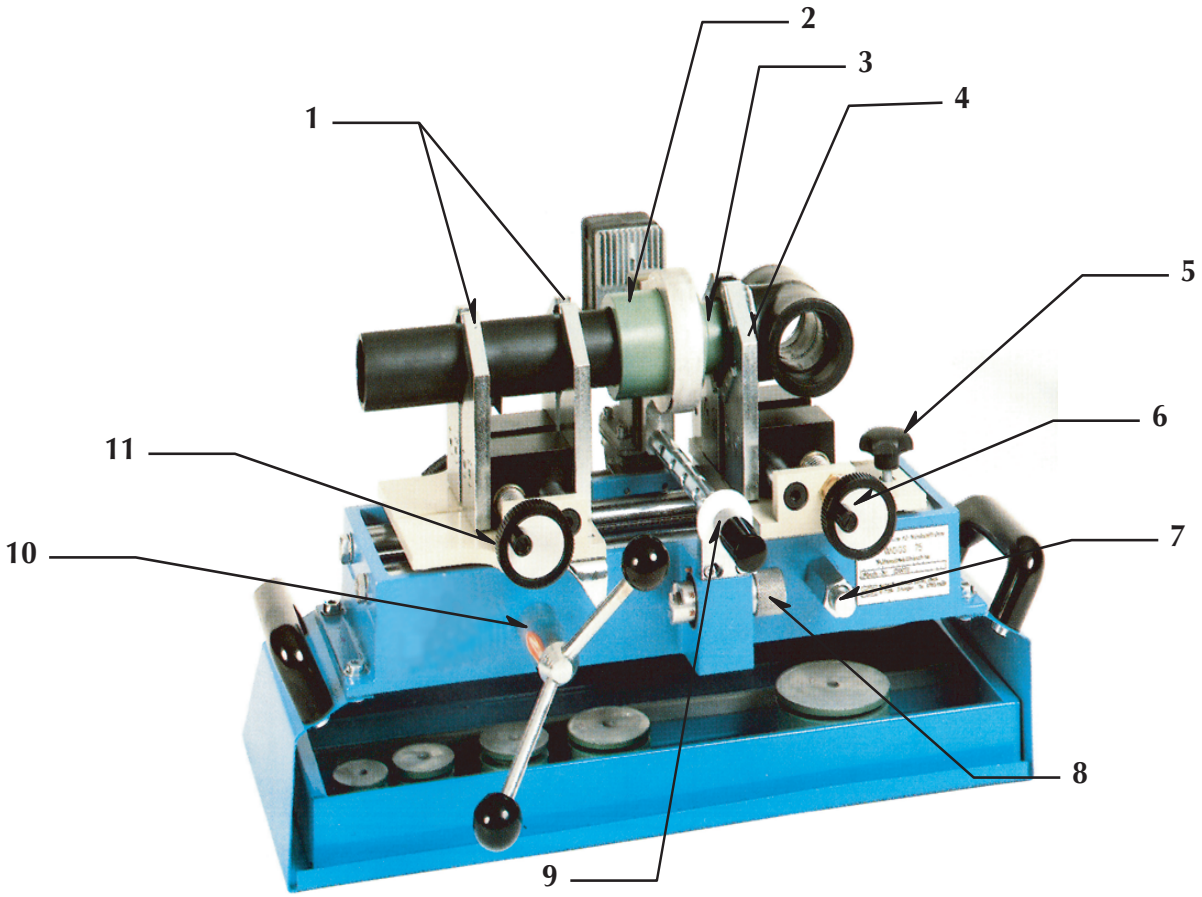
Picture 1 shows the principle of the welding method




Picture 1: Principle of heating element socket welding

# 4 Operating and Indicating Elements

## 4.1 Elements at the Front




| No. | Denomination/Function |
|---|---|
| 1 | Clamping device for pipe |
| 2 | Heating socket |
| 3 | Heating spigot |
| 4 | Clamping device for fitting |
| 5 | Turning handle for fixing; fixing the slide in a position |
| 6 | Handwheel for fitting clamping device |
| 7 | Fixing cnob for middle position; detent for zero position which ensures a simultaneous heating up of pipe and fitting |
| 8 | Knurled screw with end stop for insertion depth |
| 9 | Handle bar for heating element |
| 10 | Handle for slide; both slides open l close |
| 11 | Handwheel for pipe clamping device |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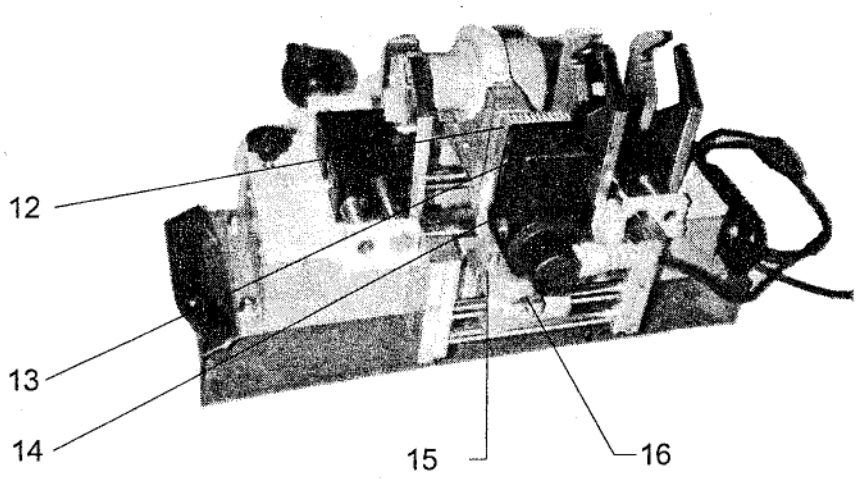
## 4.2 Elements at the back




| No. | **Denomination** | Function |
|---|---|---|
| 12 | Control lamp red | • There are 3 different states:<br>• off: signal showing that the heating element is not heated up at the moment or that it is cooling.<br>• blinking: the heating element temperature is maintained by a pulse-position ratio.<br>• on: signal showing that the heating element is heated up at the moment. The nominal temperature is not yet reached. |
| 13 | Control cnob | • Setting the temperature of the heating element |
| 14 | Switch on/off | • Lightens as soon as the heating element is switched on |
| 15 | Cylinder head screw M6x35 | • Releasing the attachement of the heating element |
| 16 | Cylinder head screw M4x20 | • Radial adjustment of the heating element |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# 5. Starting and Operating

The statements of this chapter should help you operate the machine. It also should lead you tostart the machine appropriately.
This comprises:

- Operating the machine safely
- Making use of the possibilities offered
- Running the machine economically

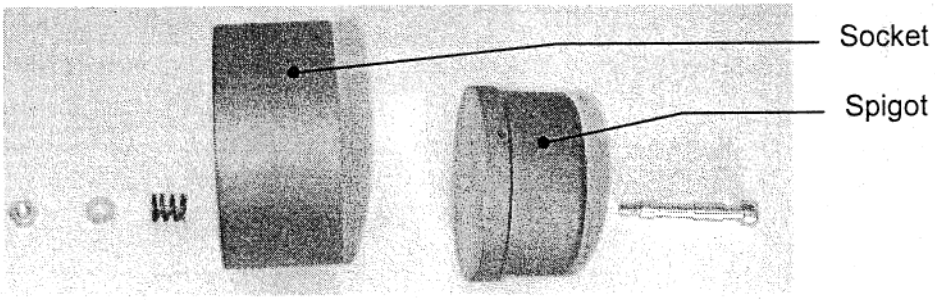
## 5.1.Starting

The machine may be operated by trained and authorized persons only. For qualification a plastic welder examination according to DVS and DVGW can be taken. If dangers occur unplug the machine immediately

After completion of the welding work and during breaks the machine is to be switched off and the legitimacy card is to be removed. Furthermore, you have to make sure that no unauthorized persons have access to the machine.

Protect the machine from wetness and moisture ! For working at the building site use a current distributor with a FI-security protective switch.

- Screw the cleaned and grease-free socket and spigot of the required diameter onto the heating element, heating spigot right-hand I heating socket left-hand, (use the special cylinder head screw, the pressure spring, washer and hexagon nut according to the illustration).




- Screw on the prismatic clamping tools which correspond to the diameter range (on the right-hand side there must be the fitting stops to clamp the fitting).
- Connect the heating element to the power supply system (110 V 160 Hz).
- Environment: do not weld below 5° C, if necessary heat up before welding avoid humidity, if necessary put up a tent
- In case of ambient temperatures under 5° C the following measures have to be taken: If need be, put up a welding tent and heat up the pipe ends.
- Take measures against rain, wind and dust.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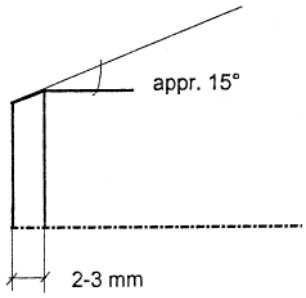
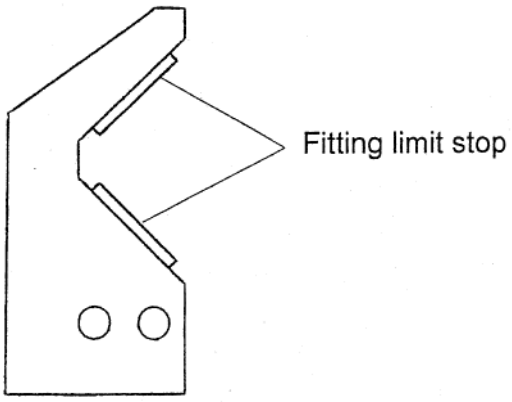
## 5.2 Welding process

Basically, the valid welding regulations (ISO/CEN/DVS...) are to be observed. Do wear safety gloves as protection against burning !

- A stop-watch is to be available in order to be able to register the actual times for heating up and cooling.
- A welding table is to be available from which you can read the parameters that are prescribed by the welding regulations for the pipe dimension to be welded.
- The heating element socket / spigot are to be clean and, above all, free from grease.
- Therefore they are to be cleaned with non-fraying paper and detergent (e.g. PE-cleaner) before every welding or if they are dirty.
  The nonstick coating of the heating element must remain undamaged in the working area.
- In addition, the workpieces (fitting and pipe) to be welded must be clean. If need be, clean them with detergent and non-fraying paper.
- The pipe end is to be chamfered to appr. 15°.

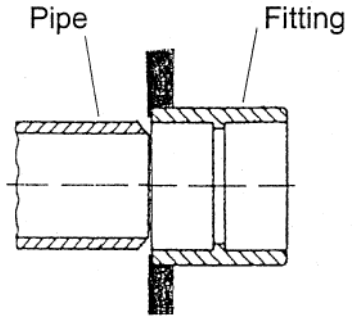



- Switch on the heating element and adjust the necessary welding temperature at the adjusting screw at the handle.
- If the control lamp blinks, the nominal temperature has been reached and is maintained by a defined pulse-position ratio.
- Take the values for heating time, change over time and cooling time from the table.
- Press the fitting in the right-hand clamping device onto the stop and clamp it tightly.




Picture 2: Clamping device for fitting

• Open the machine, press the fixing cnob (see point 4.1 No. 7) and keep it pressed, close the machine until it reaches the stop (zero position). If need be, secure the position by means of the turning handle for fixing (see point 4.1 No.5).
• Insert the chamfered pipe so that the end face is adjacent to the fitting. Pipe Fitting

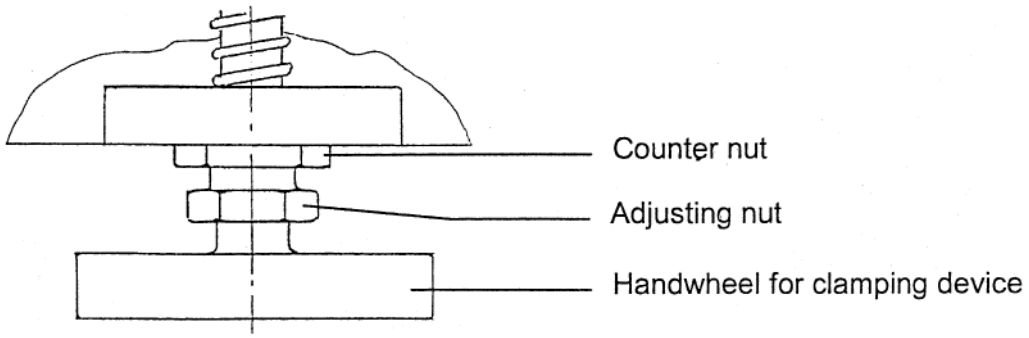



Picture 3: Positioning the pipes towards the fitting

• Clamp the pipe tightly.
• If need be, compensate the horizontal mismatch:
The position of the heating element can be adjusted at the screw (see point 4.2 No.16).

The heating element is not fixed after swinging in and remains movable to the top. For this reason, a vertical mismatch compensation is not necessary.

In addition, the horizontal mismatch can be compensated by loosening the counter nut and adjusting at the adjusting nut.




Picture 4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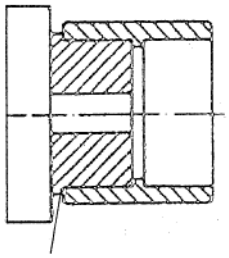
- If need be, loosen the turning handle for fixing (see point 4.1 No. 5) and open the slide by means of the handle.
- Set the diameter to be processed at the limit stop for insertion depth.
- Swing in the heating element which has been brought to temperature (control lamp is blinking).
- Close the machine slowly and with low force onto the limit stop of socket and spigot (pipe and fitting must touch the socket / spigot simultaneously).



Insertion depth at heating spigot Picture 5

- Press the stop watch. After expiration of the heating time, the change over time starts: open the machine quickly, swing out the heating element and close immediately the machine slowly and with low force up to the limit stop (change over time).
- Now, the cooling time starts. After expiration of the cooling time, the welding process is finished, the pieces can be unclamped and removed.

# 6. Welding Log and Tables

Standard values for heating element socket welding of pipeline components at an ambient temperature of 20°C and at a moderate air flow. Welding temperature for all methods: 255°C - 270°C

## 6.1 Table for PP

| DVS 2207-11 | | | | | |
|---|---|---|---|---|---|
| **Pipe** | | **Insertion Time** | **Maximum Change Over Time** | **Cooling Time** | |
| OD (Inches) | OD (MM) | SDR11 (sec) | (sec) | Clamped (sec) | Cooling Time (min) |
| 3/8” | 16 | 5 | 4 | 6 | 2 |
| ½” | 20 | 5 | 4 | 6 | 2 |
| ¾” | 25 | 7 | 4 | 10 | 2 |
| 1” | 32 | 8 | 6 | 10 | 4 |
| 1¼” | 40 | 12 | 6 | 20 | 4 |
| 1½” | 50 | 18 | 6 | 20 | 4 |
| 2” | 63 | 24 | 8 | 30 | 6 |
| 2½” | 75 | 30 | 8 | 30 | 6 |
| 3” | 90 | 40 | 8 | 40 | 6 |
| 4” | 110 | 50 | 10 | 50 | 8 |

## 6.2 Table for PVDF

| DVS 2207-15 | | | | | |
|---|---|---|---|---|---|
| **Pipe** | | **Insertion Time** | **Maximum Change Over Time** | **Cooling Time** | |
| OD (Inches) | OD (MM) | SDR21 (sec) | (sec) | Clamped (sec) | Cooling Time (min) |
| 3/8” | 16 | 4 | 4 | 6 | 2 |
| ½” | 20 | 6 | 4 | 6 | 2 |
| ¾” | 25 | 8 | 4 | 6 | 2 |
| 1” | 32 | 10 | 4 | 12 | 4 |
| 1¼” | 40 | 12 | 4 | 12 | 4 |
| 1½” | 50 | 18 | 4 | 12 | 4 |
| 2” | 63 | 20 | 6 | 18 | 6 |
| 2½” | 75 | 22 | 6 | 18 | 6 |
| 3” | 90 | 25 | 6 | 18 | 6 |
| 4” | 110 | 30 | 6 | 24 | 8 |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# 7 Maintenance / Storage / Transport

## 7.1 Maintenance

- Replace defective parts immediately, be especially carefull with electric parts - dirt and wetness are good current conducters.
- Use original SIMTECH spare parts only.

Prescribed maintenance and inspection works have to be carried out in time. According to DVS, inspection works are recommended after 1 year.

At machines which are used more than average, the inspection cycle should be shortened.

The works have to be performed at the WIDOS company or at an authorized partner.

## 7.2 Storage

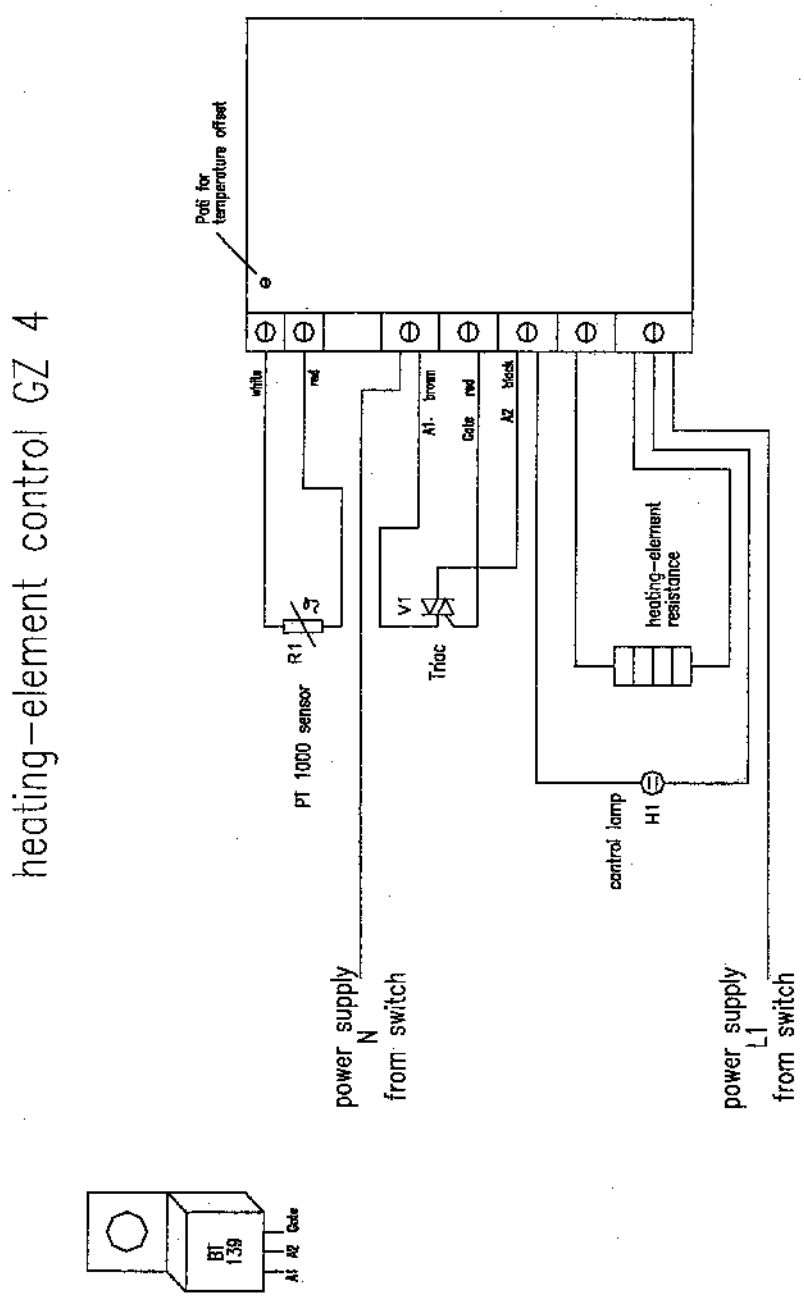
- Keep the guide rods, toothed rods, toothed wheel and trapezoid spindle free from dirt and covered with a thin oilfilm.
- Cover the machine during non-use.
- Store dry.

## 7.3 Transport

The machine is transported in a steel carrying case.

- Take care that the cable of the heating element is not squeezed.
  Protect the machine from heavy vibrations and shocks. Make sure that the box cover is correctly locked.
- Handle the machine carefully.

# 8 Electric Diagrams



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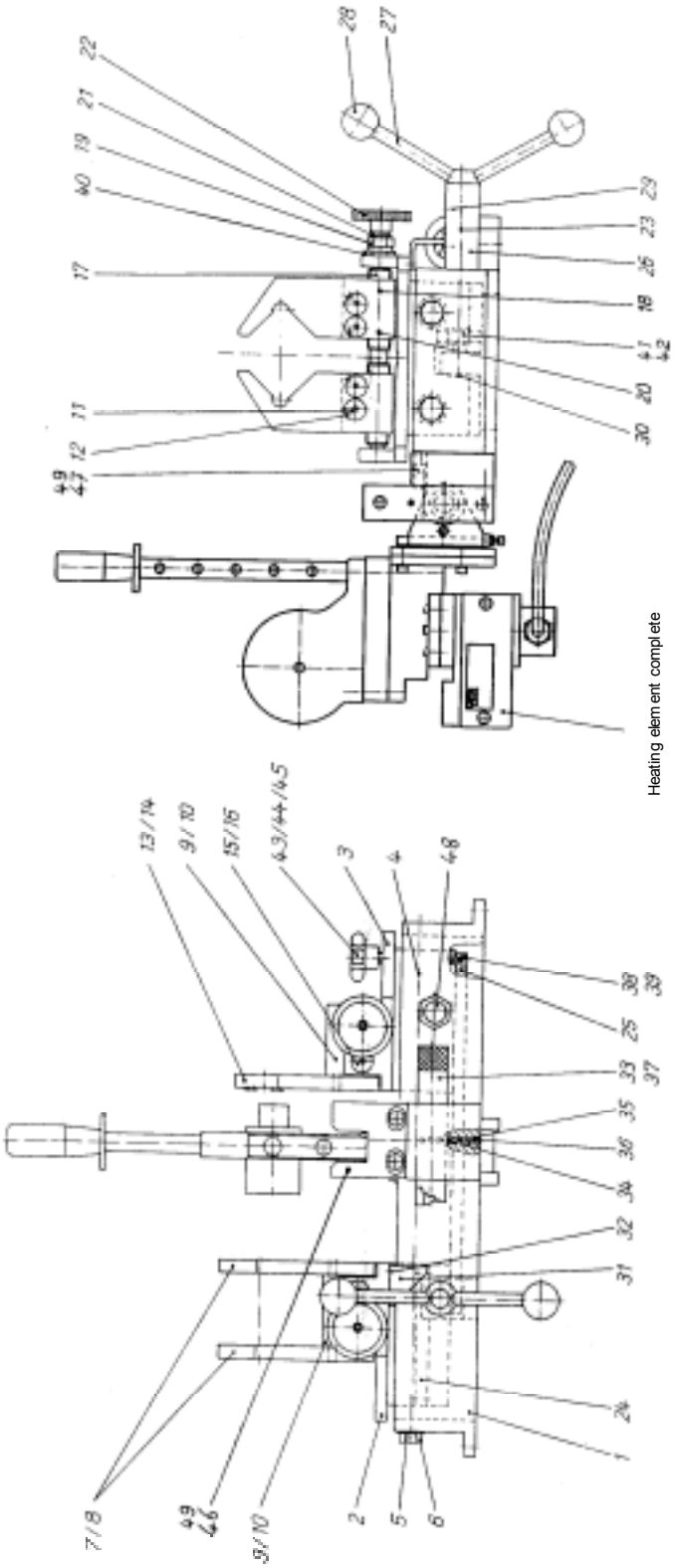
# 9 Spare Parts lists

## 9.1 Basic Machine



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## 9.1 Basic Machine

| Pos. | Name | Piece | Order no. |
|---|---|---|---|
| 1 | Basic unit | 1 | 371003 |
| 2 | Slide, left-hand | 1 | 370102 |
| 3 | Slide, right-hand | 1 | 370101 |
| 4 | Shaft | 2 | 370104 |
| 5 | Disc M 10 DIN 125 | 2 | 0125J |
| 6 | Hexagon screw M10x20 DIN 933 | 2 | 0933J020 |
| 7 | Prismatic clamping device for pipe OD 20-40 left-hand | 2 | 370723 |
| | Prismatic clamping device for pipe OD 50-75 left-hand | 2 | 370727 |
| 8 | Prismatic clamping device for pipe OD 20-40 right-hand | 2 | 370724 |
| | Prismatic clamping device for pipe OD 50-75 right-hand | 2 | 370728 |
| 9 | Guide block, right-hand | 2 | 371705 |
| 10 | Guide block, left-hand | 2 | 371706 |
| 11 | Flat-head screw M8x25 DIN 7991 | 12 | 7991H025 |
| 12 | Straight pin D4m6x20 DIN 6325 | 16 | 6325D020 |
| 13 | Prismatic clamping device for fitting OD 20-40 left-hand | 1 | 370721 |
| | Prismatic clamping device for fitting OD 50-75 left-hand | 1 | 370725 |
| 14 | Prismatic clamping device for fitting OD 20-40 right-hand | 1 | 370722 |
| | Prismatic clamping device for fitting OD 50-75 right-hand | 1 | 370726 |
| 15 | Shaft for guide block | 2 | 371711 |
| 16 | Cylinder head screw M10x20 DIN 7984 | 4 | 7984J020 |
| 17 | Rod for guide of prismatic clamping device | 2 | 371708 |
| 18 | Bush | 4 | 371712 |
| 19 | Adjusting screw for mismatch compensation | 2 | 370710 |
| 20 | Trapezoidale thread nut | 4 | 370713 |
| 21 | Snap ring 14 DIN 471 | 2 | 0471N |
| 22 | Handw heel | 2 | BH028 |
| | Grub screw M5x6 DIN 915 | 2 | 0915E006 |
| 23 | Trans miss ion shaft w ith pin | 1 | 371009 |
| 24 | Gear rack, upside m=1 | 1 | 371015 |
| 25 | Gear rack, below m=1 | 1 | 371016 |
| 26 | Bushing for grip | 1 | 370118 |
| 27 | Grip | 2 | 370119 |
| 28 | Ball handle C30 DIN 319 | 2 | 0319C30 |
| 29 | Grub screw M6x8 DIN 915 | 2 | 0915F008 |
| 30 | Snap ring 10 DIN 471 | 1 | 0471J |


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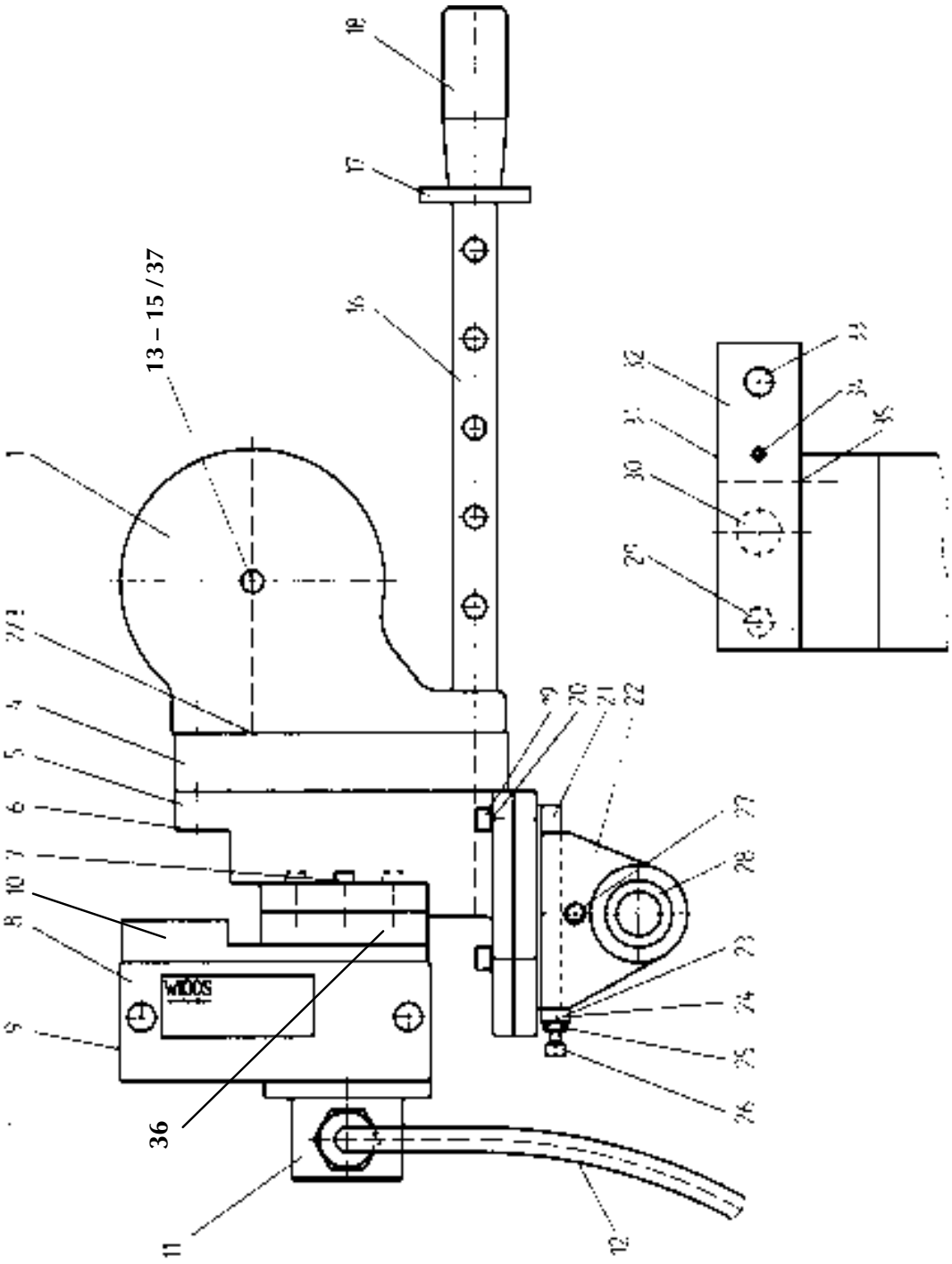
## 9.1 Basic Machine

| | | | |
|---|---|---|---|
| 31 | Limit stop | 1 | 371013 |
| 32 | Flat-head screw M5x10 DIN 7991 | 2 | 7991E010 |
| 33 | Shaft for diameter adjustment | 1 | 371014 |
| 34 | Ball for locking D 4762 | 1 | on request |
| 35 | Pressure spring for ball | 1 | on request |
| 36 | Grub screw M6x10 DIN 913 | 1 | 0913F010 |
| 37 | Snap ring 25 DIN 472 | 3 | 0471Y |
| 38 | Cylinder head screw M4x12 DIN 912 | 4 | 0912D012 |
| 39 | Tooth lock washer DIN 6797 | 4 | 6797D |
| 40 | Counter nut M20x1,5 | 2 | on request |
| 41 | Toothed gear m=1 t=21 | 1 | 370117 |
| 42 | Feather key A 4x12 DIN 6885 | 1 | 6885D012 |
| 43 | Lock nut M8x16 DIN 7965 | 1 | 7965H016 |
| 44 | Pressure block | 1 | on request |
| 45 | Handle BD 908 | 1 | on request |
| 46 | Fork | 1 | 371004 |
| 47 | Steel sheet | 1 | 371005 |
| 48 | Arrest stop | 1 | 371006 |
| 49 | Cylinder head screw M5x16 DIN 912 | 4 | 0912E016 |

## 9.2 Heating Element



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## 9.2 Heating Element

| Pos. | Name | Piece | Order no. |
|---|---|---|---|
| 1 | Heating plate | 1 | HP0075E |
| 2 | Holder for sensor NTC | 1 | 370527 |
| 3 | Sensor NTC | 1 | H0908 |
| 4 | Transition piece (insulation) | 1 | 371518 |
| 5 | Connection piece | 1 | 371510 |
| 6 | Cylinder head screw M6x50 DIN 912 | 2 | 091 2F050 |
| 7 | Cylinder head screw M4x20 DIN 912 | 3 | 0912D020 |
| 8 | Housing for control | 1 | 371514 |
| 9 | Temperature control GZ 4 | 1 | H0908220 |
| 10 | Triac for EZ4 w ith heat sink | 1 | H09081 |
| 11 | Cap of housing | 1 | 371515 |
| 12 | Connection cable | 1 | on request |
| 13 | Cylinder head screw for Socket, spigot | 1 | 371530 |
| 14 | Disc M6 DIN 125 | 2 | 0125F |
| 15 | Hexagon nut M6 DIN 934 | 1 | 0934F |
| 16 | Grip bar | 1 | 371512 |
| 17 | Disc | 1 | 371513 |
| 18 | Handle GN 539-23-M10 | 1 | 101033 |
| 19 | Cylinder head screw M5x20 DIN 912 | 3 | 091 2E020 |
| 20 | Disc M5 DIN 125 | 3 | 01 25e |
| 21 | Spacer plate | 1 | 371511 |
| 22 | Guide rocker | 1 | 371506 |
| 23 | Stop strip | 1 | 371519 |
| 24 | Cylinder head screw M3x12 DIN 912 | 1 | 0912C012 |
| 25 | Hexagon nut M4 DIN 934 | 1 | 0934D |
| 26 | Cylinder head screw M4x20 DIN 912 | 1 | 0912D020 |
| 27 | Cylinder head screw M6x35 DIN 912 | 1 | 091 2F035 |
| 28 | Socket w ith ball bearing | 1 | on request |
| 29 | Distance bolt | 1 | 371509 |
| 30 | Guide shaft | 1 | 371505 |
| 31 | Pendulum strip | 2 | 371508 |
| 32 | Strip for screws | 2 | 371507 |
| 33 | Cylinder head screw M5x20 DIN 912 | 2 | 091 2E020 |
| 34 | Cylinder head screw M5x20 DIN 912 | 2 | 091 2E020 |
| 35 | Cylinder head screw M6x40 DIN 912 | 4 | 091 2F040 |
| 36 | Insulating ring (teflon) for heating element | 1 | H09091 |
| 37 | Pressure spring | 1 | 150121 |
| 38 | Spigot, socket, green OD 20-75* | 1 | HD...* |
| -- | Spigot, socket, silverstone OD 20-75* | 2 | HD. ..* |



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